

USER'S MANUAL Vol.1 (Basic)

Thank you for purchasing this projector.



WARNING • Please read the accompanying manual “SAFETY INSTRUCTIONS” and this “USER'S MANUAL” thoroughly to ensure correct usage through understanding. After reading, store this instruction manual in a safe place for future reference.

NOTE

- The information in this manual is subject to change without notice.
- The manufacturer assumes no responsibility for any errors that may appear in this manual
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PROJECTOR FEATURES

This liquid crystal projector is used to project various computer signals as well as NTSC / PAL / SECAM video signals onto a screen. Little space is required for installation and large images can easily be realized.

● Ultra High Brightness

Crisp, ultra-bright presentations is achieved by using a UHB (ultra high brightness) lamp and a highly efficient optical system

● Partial Magnification Function

Interesting parts of images can be magnified for closer viewing

● Keystone Distortion Correction

Quick correction of distorted images electrically

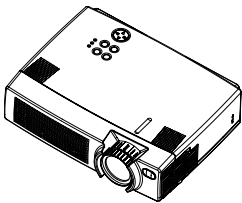
● Whisper Mode Equipped

Special mode is available for reducing projector noise to achieve quieter operation

PREPARATIONS

Your projector should come with the items shown below. Check to make sure that all the items are included. Contact your dealer if anything is missing.

NOTE • Keep the original packing material for future reshipment.



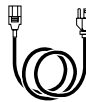
**Projector
(with Lens Cap)**



**User's Manuals
(Vol.1/Vol.2)
Safety Instructions**



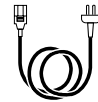
Carrying Bag



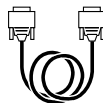
**Power cord
(US Type)**



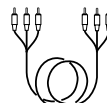
**Power cord
(UK Type)**



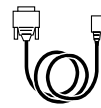
**Power cord
(Europe Type)**



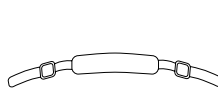
RGB cable



Video/Audio cable



**Mouse cable
(PS/2)**



Handle



**Two AA batteries
(for the remote control)**



**Remote Control
Transmitter**

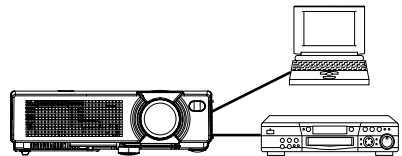
WARNING Precautions to observe in regards to the power cord: Please use extra caution when connecting the projector's power cord as incorrect or faulty connections may result in FIRE AND/OR ELECTRICAL SHOCK. Please adhere to the following safety guidelines to insure safe operation of the projector:

- Only plug the power cord into outlets rated for use with the power cord's specified voltage range.
- Only use the power cord that came with the projector.
- NEVER ATTEMPT TO DEFEAT THE GROUND CONNECTION OF THE THREE-PRONGED PLUG!
- Make sure that you firmly connect the power cord to the projector and wall outlet.

1 Connect your devices to the projector

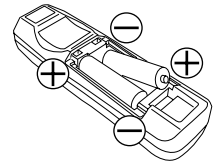
8 ~ 12

Connect your computer, VCR and/or other devices you will be using to the projector.



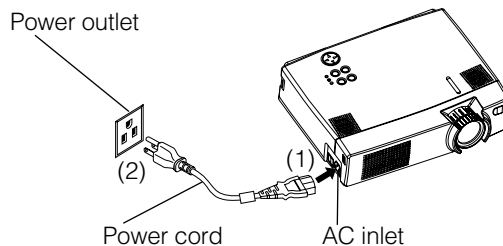
2 Insert the batteries into the remote control

13




3 Connect the power cord

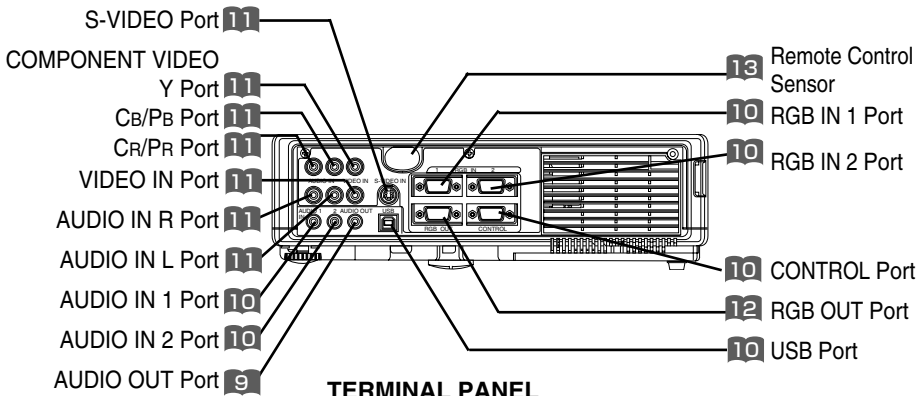
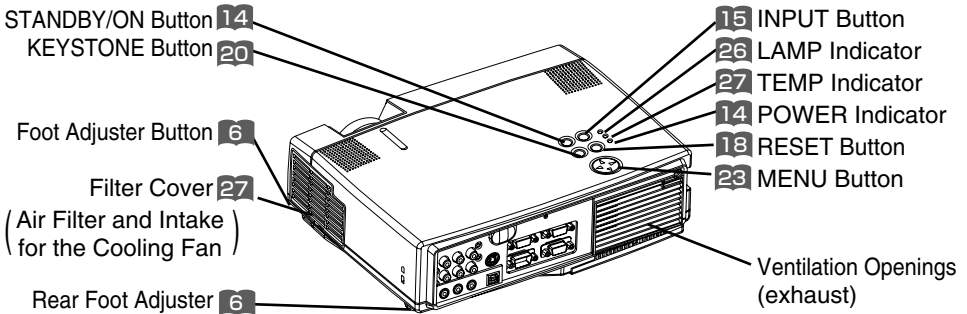
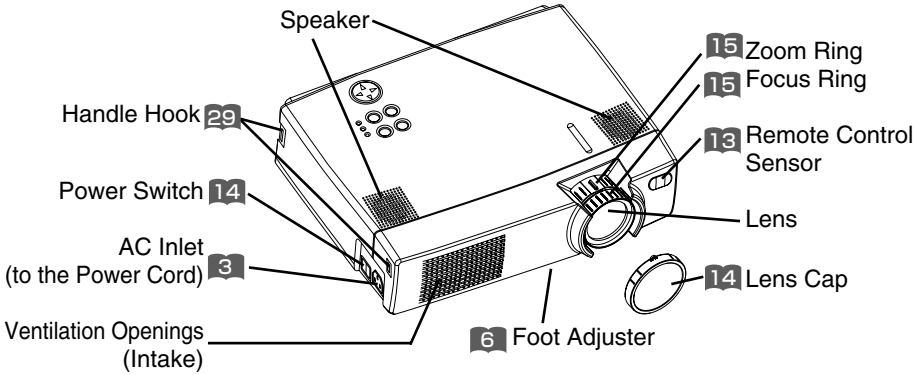
- (1) Connect the connector of the electrical power cord to the AC inlet of the main unit.
- (2) Firmly plug the power cord's plug into the outlet



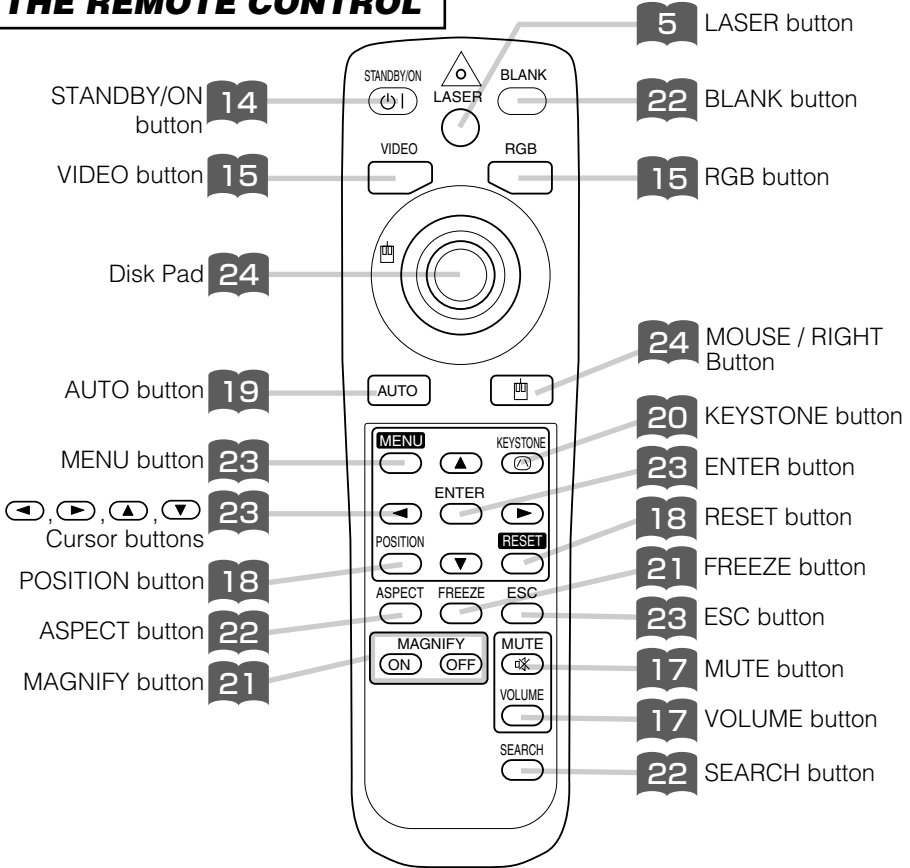
PART NAMES

THE PROJECTOR

 Indicates the corresponding reference page

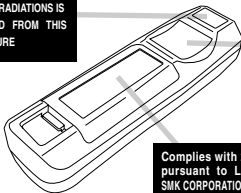


THE REMOTE CONTROL



WARNING • The laser pointer of the remote control transmitter is used in place of a finger or rod. Never look directly into the laser beam outlet or point the laser beam at other people. The laser beam can cause vision problems.

AVOID EXPOSURE-
LASER RADIATIONS IS
EMITTED FROM THIS
APERTURE



CAUTION
LASER RADIATION
DO NOT STARE INTO BEAM
MAX. OUTPUT: 1mW
WAVE LENGTH: 650nm
CLASS II LASER PRODUCT



Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No.50, dated 2001.7.26
SMK CORPORATION
6-5-5 Togoshi Shinagawa-ku, Tokyo, JAPAN 142-8511
MANUFACTURED November 2001
PLACE OF MANUFACTURER: A

- NOTE** • Keep the remote control transmitter away from children and pets.
- Do not give the remote control transmitter any physical impact. Take care not to drop.
 - Do not place the heavy objects on the remote control transmitter.
 - Do not wet the remote control transmitter or place it on any wet object.
 - Do not place the remote control transmitter close to the cooling fan of the projector.
 - Do not disassemble the remote control transmitter.

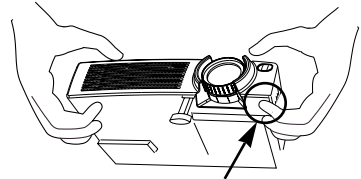
SETTING UP THE PROJECTOR

- CAUTION** • Install the projector in a suitable environment according to instructions of the accompanying manual “SAFETY INSTRUCTIONS” and this manual.
- If you press the elevator buttons without holding the projector, the projector might crash down, overturn, smash your fingers and possibly result in malfunction. To prevent damaging the projector and injuring yourself, ALWAYS HOLD THE PROJECTOR whenever using the elevator buttons to adjust the elevator feet.

Angle Adjustment

Use the foot adjusters on the bottom of the projector to adjust the projection angle. It is variable within 0° to 9° approximately.

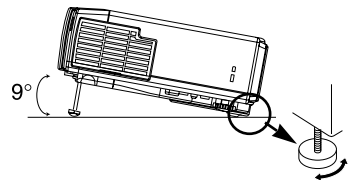
- 1 Lift up the front side of the projector, and pressing the foot adjuster button, adjust the projection angle.**



Press the foot adjuster button

- 2 Release the button to lock at the desired angle.**

- 3 Turn the rear foot adjuster to adjust the left-right slope. Do not force the foot adjuster screws. This could damage the adjusters or cause the lock to fail.**



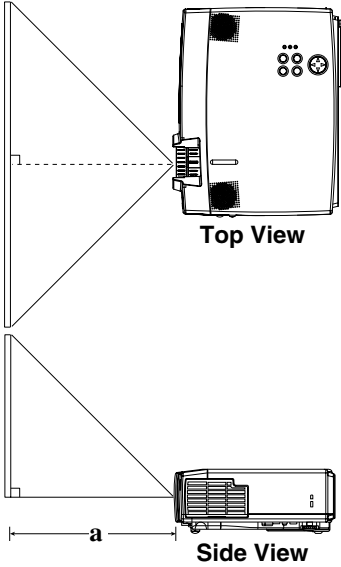
Rear Foot Adjuster

Adjusting the Screen Size and Projection Distance

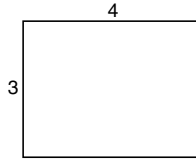
Refer to the illustrations and tables below to determine the screen size and projection distance.

The values shown in the table are calculated for a full size screen

- a: Distance from the projector to the screen ($\pm 10\%$)
- b: Distance from the lens center to the bottom of the screen ($\pm 10\%$)
- c: Distance from the lens center to the top of the screen ($\pm 10\%$)



If 4:3 aspect ratio



Screen size [inches (m)]	a [inches (m)]	
	Min.	Max.
40 (1.0)	62 (1.6)	82 (2.1)
60 (1.5)	94 (2.4)	123 (3.1)
80 (2.0)	127 (3.2)	164 (4.2)
100 (2.5)	160 (4.1)	205 (5.2)
120 (3.0)	192 (4.9)	246 (6.3)
150 (3.8)	241 (6.1)	308 (7.8)
200 (5.0)	323 (8.2)	411 (10.4)

CONNECTING YOUR DEVICES

Devices You Can Connect to the Projector (Refer to this section for planning your device configuration to use for your presentation.)



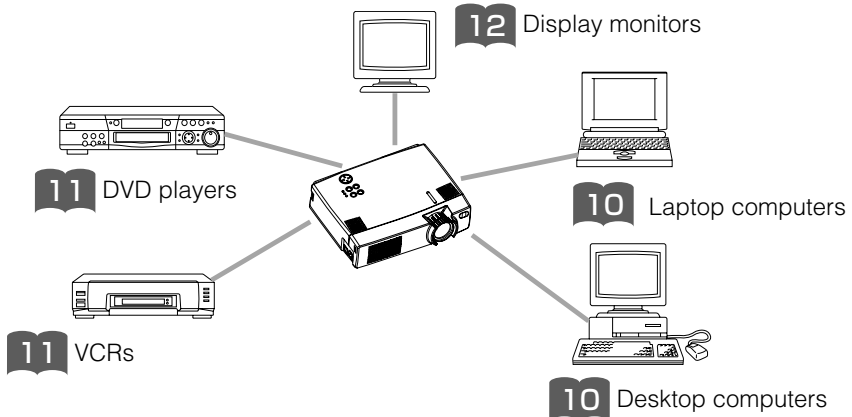
CAUTION • Incorrect connecting could result in fire or electrical shock. Please read this manual and the separate “SAFETY INSTRUCTIONS”.

ATTENTION Precautions to observe when connecting other devices to the projector

- Whenever attempting to connect other devices to the projector, please thoroughly read the manual of each device to be connected.
- **TURN OFF ALL DEVICES** prior to connecting them to the projector. Attempting to connect a live device to the projector may generate extremely loud noises or other abnormalities that may result in malfunction and/or damage to the device and/or projector. Refer to the “TECHNICAL” of the USER’S MANUAL (Vol.2) for the pin assignment of connectors and RS-232C communication data.
- Make sure that you connect devices to the correct port. Incorrect connection may result in malfunction and/or damage to the device and/or projector.
- A component cable and some other cables have to be used with core set. Use the accessory cable or a designated-type cable for the connection. For cables that have a core only at one end, connect the core to the projector.
- Secure the screws on the connectors and tighten.



Indicates the corresponding reference page



Ports and Cables

Refer to the table below to find out which projector port and cable to use for connecting a given device. Use this table for determining which cables to prepare.

Function	Projector Port	Connection Cables
RGB input	RGB IN 1	Accessory RGB cable or optional RGB cable with D-sub 15-pin shrink jack and inch thread screws
	RGB IN 2	
RGB output	RGB OUT	
Audio input (from the computer)	AUDIO IN 1 (interlocked with RGB IN 1)	Optional audio cable with stereo mini jack
	AUDIO IN 2 (interlocked with RGB IN 2)	
USB mouse control	USB	Optional USB cable
PS/2 mouse control	CONTROL	Accessory PS/2 mouse cable
ADB mouse control		Optional ADB mouse cable
Serial mouse control		Optional serial mouse cable
RS-232C communication		Optional RS-232C cable
S-video input	S-VIDEO IN	Optional S-video cable with mini DIN 4-pin jack
Video input	VIDEO IN	Accessory audio/video cable
Component video input	COMPONENT VIDEO Y	Optional component video cable
	COMPONENT VIDEO C _B /P _B	
	COMPONENT VIDEO C _R /P _R	
Audio input (from video equipment)	AUDIO IN L	Accessory audio/video cable or optional audio cable with RCA jack
	AUDIO IN R	
Audio output	AUDIO OUT	Optional audio cable with stereo mini jack

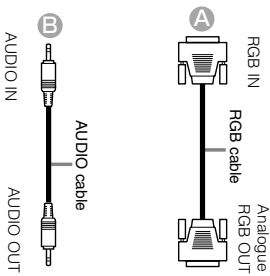
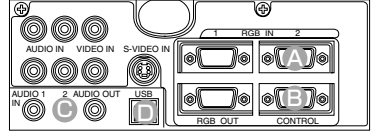
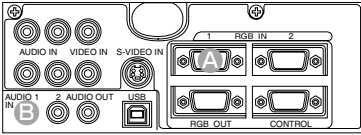
NOTE About Plug-and-Play Capability

- This projector is compatible with VESA DDC 1/2B. Plug-and-Play can be achieved by connecting this projector to computers that are VESA DDC (display data channel) compatible. Please take advantage of this function by connecting the accessory RGB cable to the RGB IN 1 port (DDC 1/2B compatible). Plug-and-Play may not work properly if any other type of connection is attempted.
- Plug-and-Play is a system composed of the computer, its operating system and peripheral equipment (i.e. display devices).
- Please use the standard drivers as this projector is a Plug-and-Play monitor.
- Plug-and-Play may not function properly with some type of computers. Use the RGB IN 2 port if Plug-and-Play does not function correctly.

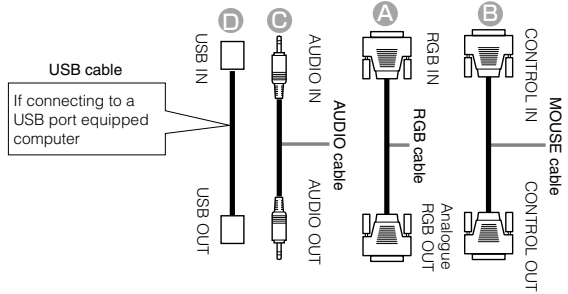
CONNECTING YOUR DEVICES (continued)

Connecting to a Computer

ATTENTION Whenever attempting to connect a laptop computer to the projector, be sure to activate the laptop's RGB external image output (set the laptop to CRT display or to simultaneous LCD and CRT display). For details on how this is done, please refer to the instruction manual of the corresponding laptop computer.



Laptop computer

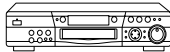
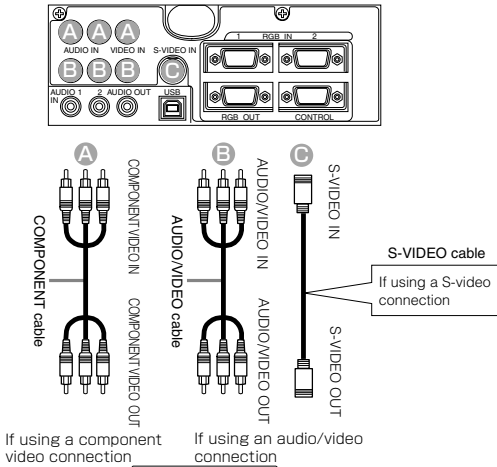


Desktop computer

NOTE

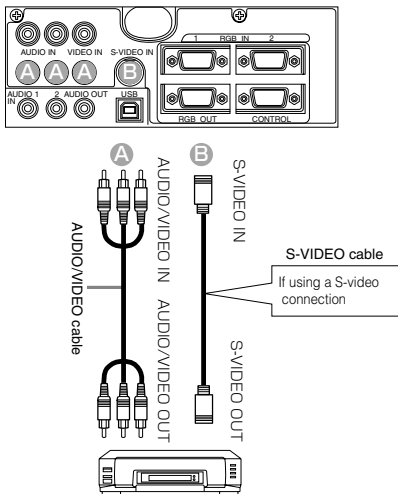
- Some computers may have multiple display screen modes. Use of some of these modes will not be possible with this projector.
- For some RGB input modes, the optional Mac adapter is necessary.

Connecting to a DVD Player



DVD player

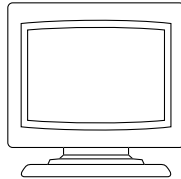
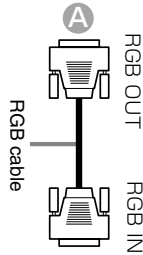
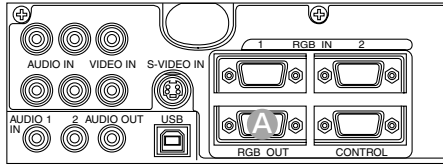
Connecting to a VCR



VCR

CONNECTING YOUR DEVICES (continued)

Connecting to a Display Monitor



Display monitor

USING THE REMOTE CONTROL

Putting batteries into the remote control unit



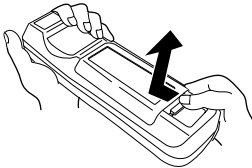
CAUTION Precautions to observe in regards to the batteries

Always handle the batteries with care and use them only as directed. Improper use may result in battery cracking or leakage, which could result in fire, injury and/or pollution of the surrounding environment.

- Keep the battery away from children and pets.
- Be sure to use only the batteries specified for use with the remote control. Do not mix new batteries with used ones.
- When inserting batteries, verify that the plus and minus terminals are aligned correctly (as indicated in the remote control).
- When you dispose the battery, you should obey the law in the relative area or country.

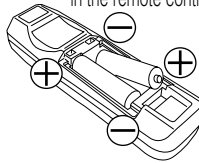
1 Remove the battery cover

Push the knob while lifting up the battery cover in the direction of the arrow.



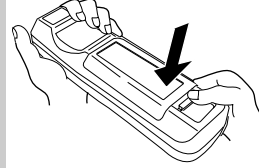
2 Insert the batteries

Align and insert the two AA batteries (that came with the projector) according to their plus and minus terminals (as indicated in the remote control).



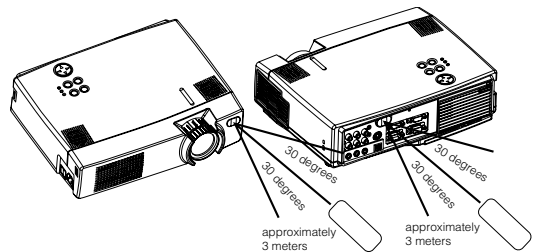
3 Close the battery cover

Replace the battery cover in the direction of the arrow and snap it back into place.



Operating the remote control

- The remote control works with both the projector's front and rear remote sensors.
- The range of the remote sensor on the front and back is 3 meters with a 60-degree range (30 degrees to the left and right of the remote sensor).
- Since the remote control uses infrared light to send signals to the projector (Class 1 LED), be sure to use the remote control in an area free from obstacles that could block the remote control's output signal to the projector.
- Only use the accompanying remote control. Using other remote controls (even of similar models) to control the CP-X385W may result in unexpected operation.



ATTENTION Precautions to observe when using the remote control

- Do not drop or otherwise expose the remote control to physical impact.
- Do not get the remote control wet or place it on wet objects. Doing so may result in malfunction.
- Remove the batteries from the remote control and store them in a safe place if you won't be using the remote control for an extended period.
- Replace the batteries whenever the remote control starts to malfunction.
- When strong light, such as direct sunlight or light from an extremely close range (such as from an inverter fluorescent lamp), hits the projector's remote sensor, the remote control may cease to function. Adjust the direction of the projector to keep light from directly hitting the projector's remote sensor.

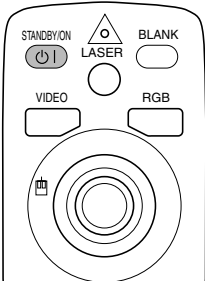
TURNING ON THE POWER

Precautions

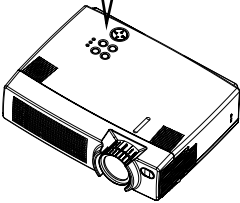
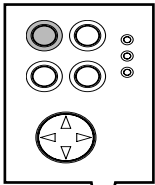
Connect all devices to be used to the projector prior to turning on the power.



WARNING When the power is ON, a strong light is emitted. Do not look into the lens.



Control panel



NOTE Turn the power on/off in right order.

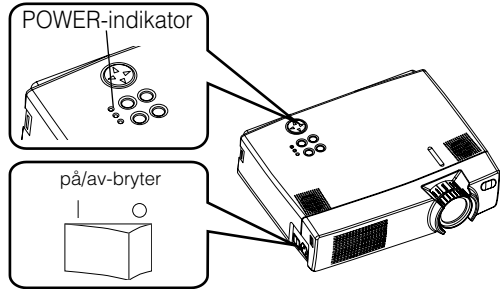
- Power on the projector before the computer or video tape recorder.
- Power off the projector after the computer or video tape recorder.

1 Make sure that the power cord is firmly and correctly connected to the projector and outlet

3

2 Turn on the projector's power

Set the power switch to [I] (ON). The projector will go to STANDBY mode and the POWER indicator will light to solid orange.



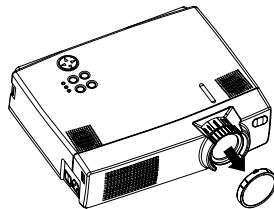
3 Press the STANDBY/ON button (control panel or remote control)

- The projector begins warming up and the POWER indicator blinks green.
- The POWER indicator stops blinking and lights to solid green once the projector's power is completely on.



4 Remove the lens cap

The picture is projected.



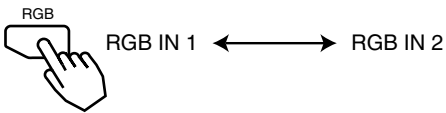
Selecting an Input Signal

5

Using the remote control

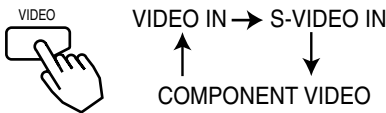
If selecting RGB input Press the RGB button

Press this button to toggle between the devices connected to RGB IN 1 and 2. As illustrated below, each time you press the RGB button, the projector switches between RGB IN 1 and 2. Select the signal you wish to project.



If selecting video input Press the VIDEO button

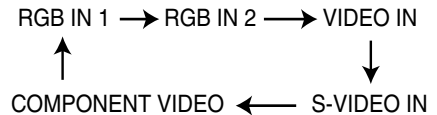
Press this button to toggle between the devices connected to VIDEO IN, S-VIDEO IN and COMPONENT VIDEO. As illustrated below, each time you press the VIDEO button, the projector switches between VIDEO IN, S-VIDEO IN and COMPONENT VIDEO. Select the signal you wish to project.



Using the projector's control panel

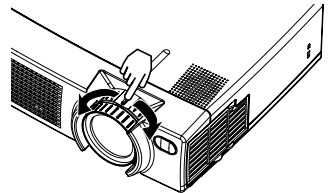
Press the INPUT button

As illustrated below, each time you press the INPUT button, the projector switches between its input signal ports. Select the signal you wish to project.



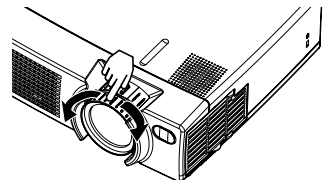
6

Use the zoom ring to adjust the screen size

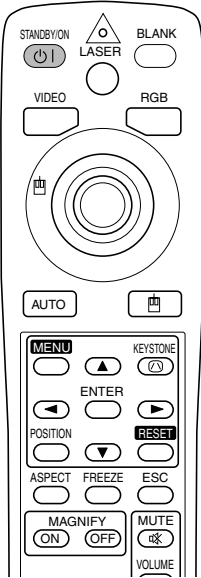


7

Use the focus ring to focus the picture



TURNING OFF THE POWER



1 Press the **STANDBY/ON** button (control panel or remote control)

The message "Power off?" will appear on the screen for approximately 5 seconds.



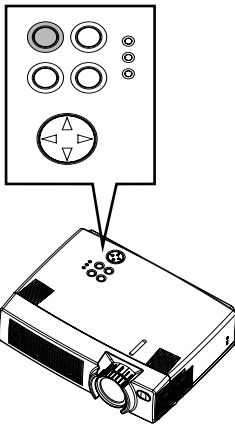
2 Press the **STANDBY/ON** button again (control panel or remote control)

Press the STANDBY/ON button again while the "Power off?" message is visible. The projector lamp goes off and starts cooling down. The POWER indicator blinks orange while the lamp cools down. (Pressing the STANDBY/ON button while the POWER indicator is blinking orange has no effect.)

The system goes into the STANDBY mode after cooling down and the POWER indicator stops blinking orange and then lights to solid orange.



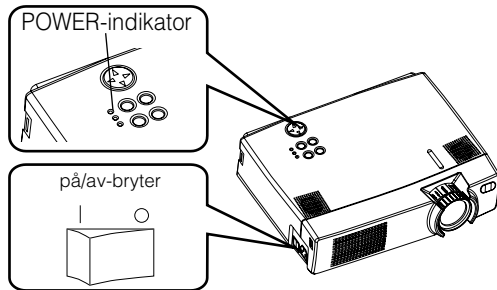
Control panel



NOTE

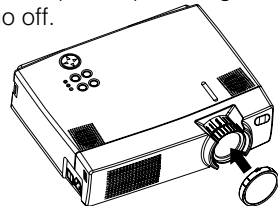
- Except in emergencies, follow the above-mentioned procedure for turning power off.

3 Check that the **POWER** indicator stops blinking and lights to solid orange. Switch the power switch to [O] (OFF).

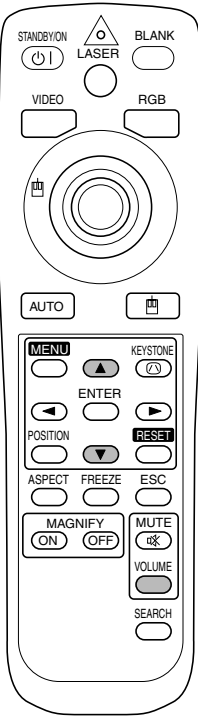


4 Confirm that the **POWER** indicator has gone off and then attach the lens cap.

When the projector has completed powering down, the POWER indicator will go off.

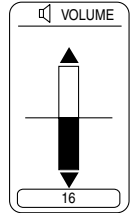


ADJUSTING THE VOLUME



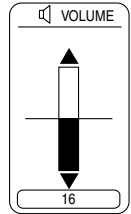
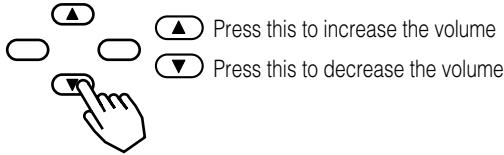
1 Press the **VOLUME** button

As illustrated on the right, a dialog will appear on the screen to aid you in adjusting the volume.

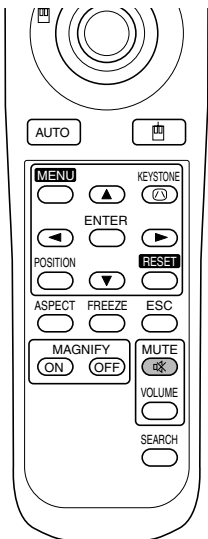


2 Press the **▲**, **▼** buttons to adjust the volume

Press the VOLUME button again to close the dialog and complete this operation. (Even if you don't do anything, the dialog will automatically disappear after a few seconds.)



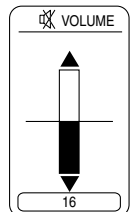
TEMPORARILY MUTING THE SOUND



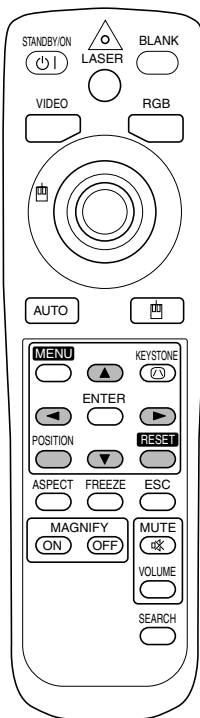
1 Press the **MUTE** button

As illustrated on the right, a dialog will appear on the screen indicating that you have muted the sound. Press the VOLUME button to close the dialog. (Even if you don't do anything, the dialog will automatically disappear after a few seconds.)

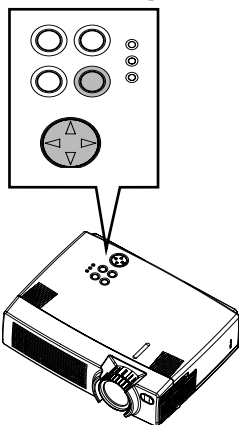
Press the MUTE button again to restore the sound.



ADJUSTING THE POSITION



Control panel



1 Press the **POSITION** button

As illustrated on the right, a dialog will appear on the screen to aid you in adjusting the position.

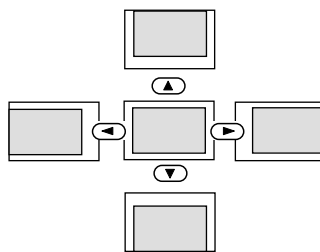
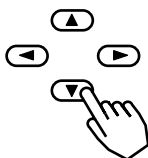


2 Use the **◀, ▶, ▲, ▼** buttons to adjust the position

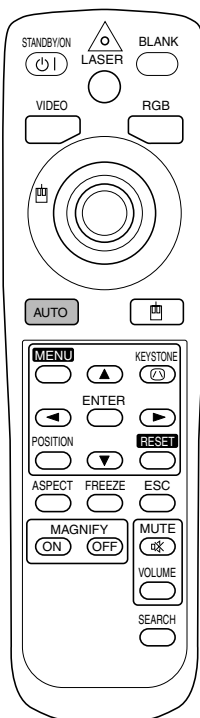
When you want to initialize the position, press the RESET button during adjustment.

Press the POSITION button again to close the dialog and complete this operation. (Even if you don't do anything, the dialog will automatically disappear after a few seconds.)

This function is only available for RGB IN 1/2 input.



USING THE AUTOMATIC ADJUSTMENT FEATURE



1 Press the **AUTO** button



Automatic Adjustment for RGB Input

Horizontal position (H. POSIT), vertical position (V. POSIT), clock phase (H. PHASE) and horizontal size (H. SIZE) are automatically adjusted.

Make sure that the application window is set to its maximum size prior to attempting to use this feature. Dark pictures may still be incorrectly adjusted. Use a bright screen when adjusting.

Automatic Adjustment for Video Input

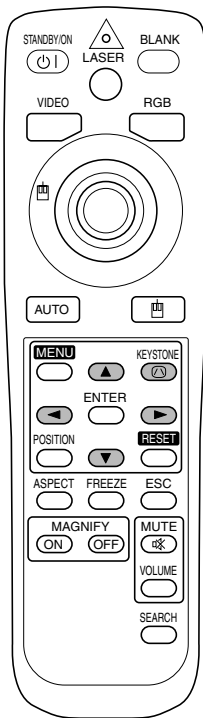
The signal type best suited for the respective input signal is selected automatically.

This feature is available only if VIDEO is set to AUTO in the INPUT menu.

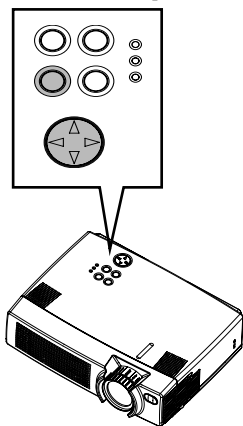
NOTE

The automatic adjustment operation requires approximately 10 seconds. Also, please note that it may not function correctly with some input signals.

CORRECTING KEYSTONE DISTORTIONS

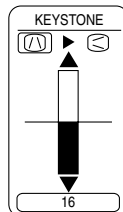


Control panel

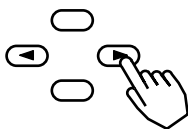


1 Press the **KEYSTONE** button

As illustrated on the right, a dialog will appear on the screen to aid you in correcting the distortion.

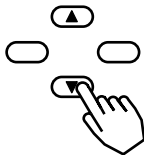


2 Use the **◀, ▶** buttons to select the direction of distortion to correct (▲/▼)



3 Use the **▲, ▼** buttons to correct the distortion

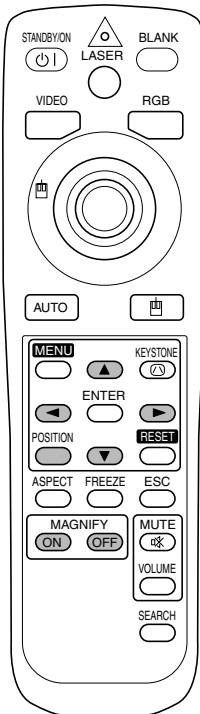
Press the KEystone button again to close the dialog and complete this operation. (Even if you don't do anything, the dialog will automatically disappear after a few seconds.)



NOTE

- This function may not work well with some types of input signals.
- The adjustable range for correcting keystone distortions will vary with the type of input signal.

USING THE MAGNIFY FEATURE

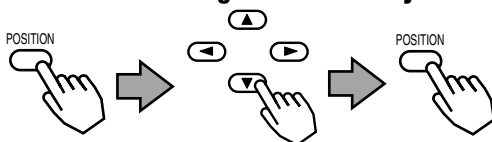


1 Press the **MAGNIFY (ON)** button

The projector enters MAGNIFY mode.

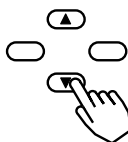


2 Press the **POSITION** button, then use the **←, →, ▲, ▼** buttons to select the area to enlarge and then press the **POSITION** button again to confirm your selection



3 Press the **▲, ▼** buttons to zoom in and out of the selected area.

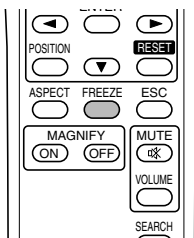
Press the MAGNIFY (OFF) button to exit MAGNIFY mode and restore the screen to normal. (The projector will also automatically exit MAGNIFY mode if there is a change in the input signal's state.)



NOTE

The projector will automatically exit from MAGNIFY mode if either the INPUT SELECT, AUTO, ASPECT or VIDEO feature is used, or, if there is a change in the input signal's state.

FREEZING THE SCREEN



1 Press the **FREEZE** button

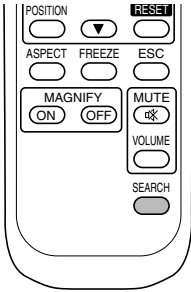
The [II] icon appears and the screen will freeze at the current image. Press the FREEZE button again and the [▶] appears as the projector exits FREEZE mode.



NOTE

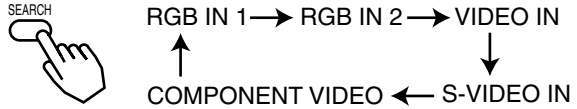
- The projector will automatically exit from FREEZE mode if either the POSITION, VOLUME, MUTE, AUTO, BLANK ON/OFF or MENU ON/OFF feature is used, or, if there is a change in the input signal's state.
- If the projector continues projecting the same image for a long time (i.e. you forget to exit FREEZE mode), the image might possibly remain as an afterimage. Do not leave the projector in FREEZE mode for too long.

SIGNAL SEARCHING

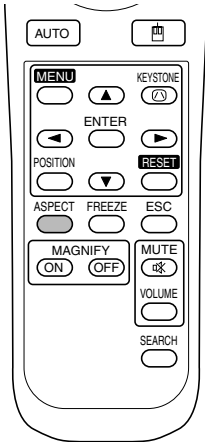


1 Press the **SEARCH** button

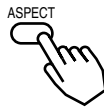
When you press the SEARCH button, the projector begins searching for input signals. If it detects an input signal, the search will cease and the projector will project the detected signal. If the projector is unable to find an input signal at any of its ports, it will return to the state it was in prior to the search.



SELECTING THE ASPECT RATIO



1 Press the **ASPECT** button



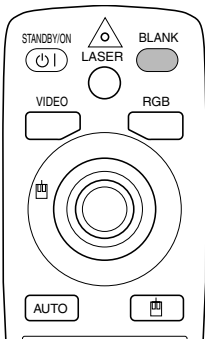
RGB IN 1, RGB IN 2, COMPONENT VIDEO
(HDTV signals : 1125i (1035i/1080i), 750p)

4:3 ↔ 16:9

VIDEO IN, S-VIDEO IN, COMPONENT VIDEO
(Non-HDTV signals : 525i, 525p, 625i)

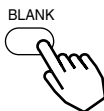
4:3 → 16:9 → SMALL
↑

TEMPORARILY BLANKING THE SCREEN

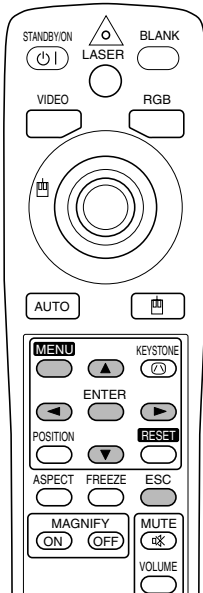


1 Press the **BLANK** button

The input signal screen is shut off, and a blank screen appears. You can set the blank screen using the menu (from the SCREEN menu, select BLANK). Press the BLANK button again to remove the blank screen, and return to the input signal screen.

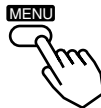


USING THE MENU FUNCTIONS



1 Press the MENU button

The menu display appears on the screen. The projector has the following menus: MAIN, PICTURE-1, PICTURE-2, INPUT, SCREEN, and OPTION. Select a menu using the / buttons. The current settings of the items that can be manipulated via the selected menu appear.

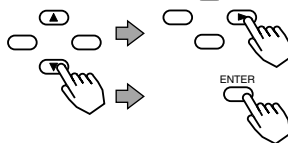


2 Select a menu using the / buttons, then press the or ENTER button.

The display of the selected menu appears.

[ex. Adjusting SHARPNESS]

Use the / buttons to select PICTURE-1, then press the or ENTER button.



MENU		
MAIN	COLOR BAL R	-1
PICTURE-1	COLOR BAL B	+1
PICTURE-2	SHARPNESS	-1
INPUT	COLOR	+1
SCREEN	TINT	-1
OPTION		

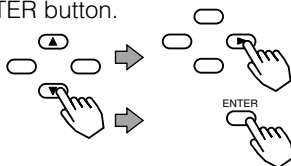
: SELECT

3 Select an item using the / buttons, then press the or ENTER button.

The operation display of the selected item appears. To adjust a numerical value, press the or ENTER button again to switch to the single menu (small display showing only the operation display area).

[ex. Adjusting SHARPNESS]

Use the / buttons to select SHARPNESS, then press the or ENTER button.



MENU		
MAIN	COLOR BAL R	-1
PICTURE-1	COLOR BAL B	+1
PICTURE-2	SHARPNESS	-1
INPUT	COLOR	+1
SCREEN	TINT	-1
OPTION		

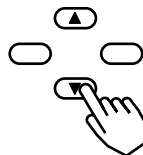
: SELECT

4 Press the / buttons to adjust the level.

Press the MENU button to hide the menu and finish your operation. Alternatively, press the or ESC button to return to the previous display.

[ex. Adjusting SHARPNESS]

Use the / buttons to adjust the SHARPNESS.

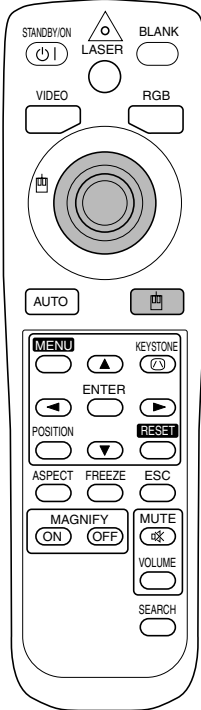


OPERATING THE PC SCREEN

You can use the remote control as a simplified mouse or keyboard.

⚠ CAUTION Caution: Mistaken use of the mouse/keyboard control could damage your equipment.

- Only connect to a PC.
- Before connecting, read the manuals of the device you will connect.
- Do not plug or unplug the connector cables while the computer is operating.



PS/2, ADB, Serial Mouse Control

1. Turn off the projector and PC power, and connect the projector's CONTROL terminal to the computer via the mouse cable.
2. If a USB cable is connected, disconnect it. If a USB cable is connected, the USB control function is given priority, and mouse control from the CONTROL terminal will not function.
3. Turn on the projector power, then the computer.
The functions in the table below can be controlled. If you have difficulty with control, restart the computer (either from the software or by pressing the restart button).

Available Functions	Remote Control Operation
Move Pointer	Use button
Left click with mouse	Press button
Right click with mouse	Press button

USB Mouse Control

1. Connect the projector's USB terminal to the computer using a USB cable.
The functions in the table below can be controlled.

Available Functions	Remote Control Operation
Move Pointer	Use button
Left click with mouse	Press button
Right click with mouse	Press button

NOTES

- It may not be possible to control notebook PCs, and other computers with built-in pointing devices (e.g. track balls), using this remote control. In this case, before connecting go into BIOS (system setup) and select external mouse, and disable the pointing devices. In addition, the mouse may not function if the computer does not have the needed utility program. See your computer's hardware manual for details.
- The USB control can be used with Windows 95 OSR 2.1 or higher. It may not be possible to use the remote control, depending on the computer's configurations and mouse drivers.
- The USB control can only be used for the functions listed above. You cannot do things like press two buttons at once (for instance, pressing two buttons at the same time to move the mouse pointer diagonally).
- This function is not available while the lamp is warming up (the POWER indicator flashes green), while adjusting the volume and display, correcting for trapezoidal distortion, zooming in on the screen, using the BLANK function, or displaying the menu screen.

THE LAMP



HIGH VOLTAGE
HIGH TEMPERATURE
HIGH PRESSURE

Before replacing the lamp, check the serial number of the replacement lamp bulb (sold separately: DT00431), then contact your local dealer. Before replacing the lamp, turn off the power, and unplug the power cord, then wait at least 45 minutes, in order to ensure that the lamp is properly cooled. Removing the lamp bulb while it is still hot could cause burns, or cause the lamp bulb to burst.

⚠ WARNING

The LCD projector uses a glass lamp bulb. It is a mercury lamp with high internal pressure. High-pressure mercury lamps can break with a loud bang, or burn out, if jolted or scratched, or through wear over time. Each lamp has a different lifetime, and some may burst or burn out soon after you start using them. In addition, when the bulb bursts, it is possible for shards of glass to fly into the lamp housing, and for gas containing mercury to escape from the projector's vent holes.

- Handle with care: jolting or scratching could cause the lamp bulb to burst during use.
- If the replace lamp indicator (see "Related Messages" (Vol.2 **7**) and "Regarding the indicator Lamps" (Vol.2 **8**)) comes on, replace the lamp as soon as possible. Using the lamp for long periods of time, or past the replacement date, could cause it to burst. Do not use old (used) lamps; this is a cause of breakage.
- If the lamp breaks soon after the first time it is used, it is possible that there are electrical problems elsewhere besides the lamp. If this happens, contact your local dealer.
- If the lamp should break (it will make a loud bang when it does), ventilate the room well, and make sure not to breathe the gas that comes out of the projector vents, or get it in your eyes or mouth.
- If the lamp should break (it will make a loud bang when it does), unplug the power cord from the outlet, and make sure to request a replacement lamp from your local dealer. Note that shards of glass could damage the projector's internals, or cause injury during handling, so please do not try to clean the projector or replace the lamp yourself.
- Obey local ordinances when disposing of used lamps. In most cases, it is possible to dispose of used bulbs in the same manner as used glass bottles, but in some cases, bulbs are sorted separately.
- Do not use the projector with the lamp cover removed.

THE LAMP (continued)

Replacing the lamp

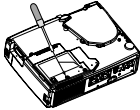
All projector lamps will wear out eventually. If used for long periods of time, the image could become darkened, and the color contrast could be impacted as well. We recommend that you replace your lamps early. If the LAMP indicator turns red, or a message prompts you to replace the lamp when you power up the projector, the lamp needs to be replaced. (See "Related Messages" (Vol.2 **7**) and "Regarding the Indicator Lamps" (Vol.2 **8**) for details.)

- 1** **With the projector OFF, remove the power cord from the power outlet, and wait at least 45 minutes for the unit to cool.**

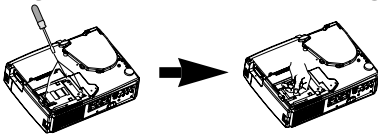
- 2** **Prepare a new lamp.**

- 3** **Check that the projector has cooled sufficiently, and gently turn it upside down.**

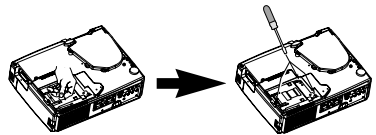
- 4** **Loosen the two screws as shown in the diagram, and remove the lamp cover.**



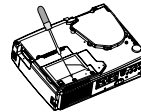
- 5** **Loosen the three screws, and gently remove the lamp while holding the grips. Touching the inside of the lamp case may result in uneven coloring.**



- 6** **Install the new lamp and tighten the three screws firmly. Also steadily push the opposite side of the screwed lamp into the unit.**



- 7** **Replace the lamp cover in position and tighten the two screws firmly.**



- 8** **Gently turn the projector right-side up.**



ATTENTION • Make sure that the screws are screwed in firmly. Loose screws could result in damage or injury.

- Do not use with lamp cover removed.
- Do not reset the lamp timer without replacing the lamp. Reset the lamp timer always when replacing the lamp. The message functions will not operate properly if the lamp timer is not reset correctly.
- When the lamp has been replaced after the message of "CHANGE THE LAMP ...THE POWER WILL TURN OFF AFTER 0 hr." is displayed, or the LAMP indicator is red, complete the following operation within 10 minutes of switching power ON.

NOTE • The LAMP indicator is also red when the lamp unit reaches high temperature. Before replacing the lamp, switch power OFF, wait approximately 20 minutes, and switch power ON again. If the LAMP indicator is still red, replace the lamp.

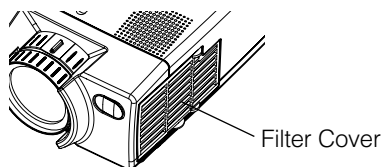
THE AIR FILTER

Caring for the air filter

The air filter should be cleaned about every 100 hours. If the LAMP indicator and TEMP indicator blink red simultaneously, or a message prompts you to clean the air filter when you turn on the unit, the filter needs to be cleaned. (See "Related Messages" (Vol.2 ) and "Regarding the Indicator Lamps" (Vol.2 ) for details.)

1 Turn off the projector, and unplug the power cord

2 Apply a vacuum cleaner to the top of the air filter cover to clean the air filter



3 Turn on the projector, and use the menu to reset the filter timer

- To reset the air filter timer, from the OPTION menu, select FILTER TIME.

THE AIR FILTER (continued)

Replacing the air filter

If the soiling will not come off the air filter, or it becomes damaged, then it needs to be replaced. Please contact your local dealer, after confirming the model of your separately sold replacement air filter. (See "Optional Parts" on Vol.2 **10**.)

1 Turn off the projector, and unplug the power cord. Prepare a new air filter (one specified for your projector)

2 Remove the air filter cover and air filter

3 Insert the new filter, and replace the filter cover

4 Turn on the projector power, and using the menu, reset the filter timer

- To reset the lamp timer, from the OPTION menu, select FILTER TIME.

ATTENTION • Make sure to turn off the power and unplug the power cord before caring for the unit. Please carefully read "Safety Instructions", in order to care for your projector correctly.

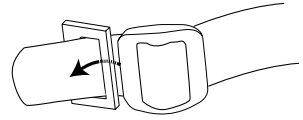
- Do not use with air filter cover removed.
- If the air filter becomes clogged by dust or the like, internal temperature rises and could cause malfunction. The power is automatically turned off in order to prevent the unit from overheating internally.

THE HANDLE

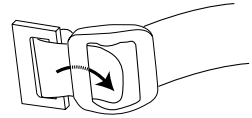
Fixing the Handle

Fix the enclosed handle if you need.

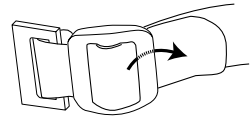
- 1 Raise up the handle hook, and pass one end of the handle through the hole of handle hook.**



- 2 Buckle the end of the handle, as the right drawing.**



- 3 Fix the other end of the handle to the other handle hook in the same way.**



⚠ CAUTION • Make sure the handle is fixed before carrying the projector with the handle. If the projector should be dropped from the handle should be off, it could result in an injury, and continued use could result in fire or electrical shock. Do not flourish the projector with the handle.

OTHER CARE

Caring for the inside of the projector :

In order to ensure the safe use of your projector, please have it cleaned and inspected by your local dealer about once every 2 years. Never try to care for the inside of the unit yourself. Doing so is dangerous.

Caring for the lens :

Lightly wipe the lens with a commercially available lens-cleaning wipe. Do not touch the lens directly with your hand.

Caring for the cabinet and remote control transmitter :

Wipe lightly with gauze or a soft cloth. If soiling is severe, dip a soft cloth in water or a neutral cleanser diluted in water, and wipe lightly after wringing well. Then, wipe lightly with a soft, dry cloth.

ATTENTION • Make sure to turn off the power and unplug the power cord before caring for the unit. Please carefully read "Safety Instructions" in this manual, in order to care for your projector correctly.

- Do not use cleaners or chemicals other than those listed above, including benzene and paint thinner.
- Do not use aerosols or sprays.
- Do not polish or wipe with hard objects.

